

We claim:

Sub

1. A method for providing call forwarding in an IP telephone network, comprising the steps of:

dialing a unique identifier for a first telephone from a second telephone to make a call;

5 routing the call to a network device;

initiating call setup procedures with customer premises equipment responsible for said first telephone;

checking stored call forwarding profiles in the customer premises equipment to determine whether there is an active call forwarding profile for said first telephone;

10 connecting said call to said first telephone if an active call forwarding profile is not found;

sending call forwarding information to said network device if there is an active call forwarding profile for said first telephone; and

routing the call to at least a third telephone based on the call forwarding information.

15 2. The method according to claim 1, further comprising the step of:

using a distinctive ringing tone at the at least third telephone to indicate that the incoming call is a forwarded call.

3. The method according to claim 1, wherein a subscriber creates call forwarding profiles using a computer connected to said customer premises equipment via phone lines.

20 4. The method according to claim 1, wherein a subscriber creates call forwarding profiles by interacting with the customer premises equipment.

5. The method according to claim 1, wherein the active call forwarding profile remains active until the call forwarding profile is disabled by a subscriber.

25 6. The method according to claim 1, wherein the active call forwarding profile remains active until the call forwarding profile is deleted from the customer premises equipment by a subscriber.

7. The method according to claim 1, wherein said call forwarding profile comprises multiple unique identifiers to which the call can be routed.

8. The method according to claim 7, wherein the call is routed simultaneously to the multiple unique identifiers when the call forwarding profile is active.

5 9. The method according to claim 7, wherein the call is routed to the multiple unique identifiers sequentially.

10. The method according to claim 1, wherein the call forwarding profile only forwards calls from a predetermined list of caller unique identifiers.

10 11. The method according to claim 1, wherein the call forwarding profile specifies that call are only to be forwarded during predetermined periods of time.

12. The method according to claim 11, wherein said predetermined periods of time are various days of the week.

13. The method according to claim 11, wherein said predetermined periods of time are various hours of the day.

15 14. The method according to claim 11, wherein said predetermined periods of time are various hours and days of the week.

15. The method according to claim 1, wherein said unique identifier is a telephone number.

16. The method according to claim 1, wherein said unique identifier is an IP address.

20 17. The method according to claim 1, wherein said customer premises equipment is a Broadband Residential Gateway

18. ~~The method according to claim 1, wherein said network device is a Call Manager.~~

25 *Sub 17* 19. An IP telephone system for providing call forwarding, comprising:  
a plurality of telephones, each telephone having a unique identifier;  
a network device for routing telephone calls between the plurality of telephones;

customer premises devices serving at least one telephone, wherein the customer premises device has memory means for storing call forwarding profiles and means for determining if the call forwarding profile is active when a call is received at the customer premises device for the telephone:

5            wherein the call is routed to the at appropriate telephone based on the call forwarding information contained in said active call forwarding profile.

20.        The system according to claim 19, wherein said memory means is a flash memory.

21.        The system according to claim 19, wherein a distinctive ringing tone is used by  
10        the telephone to which the call is forwarded so as to indicated that the incoming call has been forwarded.

22.        The system according to claim 19, wherein a subscriber creates call forwarding profiles using a computer connected to said customer premises equipment via phone lines.

23.        The system according to claim 19, wherein a subscriber creates call forwarding  
15        profiles by interacting with the customer premises equipment.

24.        The system according to claim 19, wherein the active call forwarding profile remains active until the call forwarding profile is disabled by a subscriber.

25.        The system according to claim 19, wherein the active call forwarding profile remains active until the call forwarding profile is deleted from the customer premises equipment  
20        by a subscriber.

26.        The system according to claim 19, wherein said call forwarding profile comprises multiple unique identifiers to which the call can be routed.

27.        The system according to claim 26, wherein the call is routed simultaneously to the multiple unique identifiers when the call forwarding profile is active.

25        28.        The system according to claim 26, wherein the call is routed to the multiple unique identifiers sequentially.

29. The system according to claim 19, wherein the call forwarding profile only forwards calls from a predetermined list of caller unique identifiers.

30. The system according to claim 19, wherein the call forwarding profile specifies that call are only to be forwarded during predetermined periods of time.

5 31. The system according to claim 30, wherein said predetermined periods of time are various days of the week.

32. The system according to claim 30, wherein said predetermined periods of time are various hours of the day.

10 33. The system according to claim 30, wherein said predetermined periods of time are various hours and days of the week.

34. The method according to claim 19, wherein said unique identifier is a telephone number.

35. The method according to claim 19, wherein said unique identifier is an IP address.

15 36. The method according to claim 19, wherein said customer premises equipment is a Broadband Residential Gateway.

37. The method according to claim 19, wherein said network device is a Call Manager.

20 38. A method for providing call forwarding in an IP telephone network, comprising the steps of:

creating a call forwarding profile for at least a first telephone;

storing said call forwarding profile;

routing a call from a second telephone to the first telephone to a call manager;

25 checking said stored call forwarding profile to determine whether there is an active call forwarding profile for said first telephone;

connecting said call to said first telephone if an active call forwarding profile is not found; and

routing the call to at least a third telephone based on call forwarding information in the active call forwarding profile.

39. The method according to claim 38, further comprising the step of:  
using a distinctive ringing tone at the at least third telephone to indicate that the

5 incoming call is a forwarded call.

40. The method according to claim 38, wherein a subscriber creates call forwarding profiles using a computer connected to a broadband residential gateway via phone lines.

41. The method according to claim 38, wherein a subscriber creates call forwarding profiles by interacting with a broadband residential gateway.

10 42. The method according to claim 38, wherein the active call forwarding profile remains active until the call forwarding profile is disabled by a subscriber.

43. The method according to claim 38, wherein the active call forwarding profile remains active until the call forwarding profile is deleted from a broadband residential gateway by a subscriber.

15 44. The method according to claim 38, wherein said call forwarding profile comprises multiple telephone numbers to which the call can be routed.

45. The method according to claim 44, wherein the call is routed simultaneously to the multiple telephone numbers when the call forwarding profile is active.

20 46. The method according to claim 44, wherein the call is routed to the multiple telephone numbers sequentially.

47. The method according to claim 38, wherein the call forwarding profile only forwards calls from a predetermined list of caller telephone numbers.

48. The method according to claim 38, wherein the call forwarding profile specifies that call are only to be forwarded during predetermined periods of time.

25 49. The method according to claim 48, wherein said predetermined periods of time are various days of the week.

50. The method according to claim 48, wherein said predetermined periods of time are various hours of the day.

51. The method according to claim 48, wherein said predetermined periods of time are various hours and days of the week.

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